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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF EDUCATION
LANSING



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SUPERINTENDENT OF
PUBLIC INSTRUCTION

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MEMORANDUM

TO: State Board of Education

FROM: Michael P. Flanagan, Chairman

SUBJECT: Presentation on Career and Technical Education Standards

The reauthorization of the Carl D. Perkins Act aligns Career and Technical Education (CTE) programs with the current trend in education toward uniform standards, a focus on student outcomes, and accountability measures. The Act requires that CTE programs of instruction demonstrate that students receive rigorous instruction in both academic and technical skills and that instruction is delivered through programs of study that prepare students for postsecondary education. These requirements are in support of, and align with, the goals of the Governor and the State Board of Education.

A significant component of the Act is the requirement to measure technical skill achievement through the use of assessments at the completion of a CTE program. To meet this mandate, it is necessary for CTE programs in Michigan to use common standards in CTE programs of instruction.

In 2005, CTE teachers were asked to align their program curriculum to the Career Clusters model developed by the United States Department of Education. The 16 Career Clusters include broad statements specifying the foundational knowledge and skills required of learners/workers in order to demonstrate competence in a given career. The knowledge and skills represented within each cluster focus on the holistic blend of technical, academic and employability skills and provide an organizational framework for instruction. They also provide a common language for educators and business and industry partners to describe learner/worker expectations.

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At the cluster level, the knowledge and skill statements are very broad and basic. The further a student travels in a career pathway, the more specialized the instructional content becomes. Therefore, each cluster provides the framework on which to build CTE instructional programs in Michigan. Using the clusters as the base, other Michigan standards are also included to provide a robust program of instruction.

The additional standards within each CTE program include the High School Content Expectations (where they are naturally embedded in the curriculum), the Michigan Career and Employability Skills, the Michigan Technology Education Standards, and Technical Skills Standards specific to each CTE program. The result is a comprehensive package of skills expectations that are common among instructional areas. The standards give uniformity throughout programs, supply consistent expectations for teaching and learning, and provide a foundation from which to select assessment options over the next few years.

Since CTE draws its curriculum from the workplace, standards for CTE programs must remain fluid and flexible. The revalidation of the Career Clusters will take place every four years. As technological advancements and changes in processes and practices take place within business and industry, teachers must be poised to make adjustments to their instruction. Continuous communication with members of business and industry advisory committees is critical so that programs remain up-to-date with the needs of employers.

The convergence of influences such as global competition and its impact on legislation and policy, and a focus on achievement and accountability call for dramatic changes in the education system. Responding to these constantly evolving challenges is the driving force behind CTE standards and programs of study. Diligence to continuous improvement and being responsive to these influences is critical to moving in the right direction for the benefit of students, the enhancement of the workforce in Michigan, and a positive impact on the economy.

The Board will be asked to approve the CTE Standards at its February meeting.

The 16 Career Clusters



Agriculture, Forestry, and Natural Resources

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.



Architecture and Construction

Careers in designing, planning, managing, building and maintaining the built environment.



Arts, Media, and Communications

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.



Business, Management, and Administration

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.



Education and Training

Planning, managing and providing education and training services, and related learning support services.



Finance

Planning, services for financial and investment planning, banking, insurance, and business financial management.



Government and Public Administration

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.



Health Science

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.



Hospitality and Tourism

Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.



Human Services

Preparing individuals for employment in career pathways that relate to families and human needs.



Information Technology

Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.



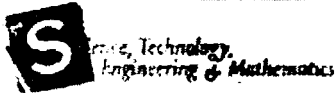
Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.



Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.



Planning, managing, and performing marketing activities to reach organizational objectives.



Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.



Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

The following knowledge and skill statements are essential to success for careers in all clusters and pathways. Persons preparing for careers at any level should be able to demonstrate these skills in the context of their chosen cluster and pathway.

Essential Topic	ACADEMIC FOUNDATIONS: <i>Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.</i>
ESS01	Complete required training, education, and certification to prepare for employment in a particular career field.
ESS01.01	
ESS01.01.01	Identify training, education and certification requirements for occupational choice.
ESS01.01.02	Participate in career-related training and/or degree programs.
ESS01.01.03	Pass certification tests to qualify for licensure and/or certification in chosen occupational area.
ESS01.02	Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities.
ESS01.02.01	Model behaviors that demonstrate active listening.
ESS01.02.02	Adapt language for audience, purpose, situation. (i.e. diction/structure, style).
ESS01.02.03	Organize oral and written information.
ESS01.02.04	Compose focused copy for a variety of written documents such as: agendas, audio-visu-als, bibliographies, drafts, forms/documents, notes, oral presentations, reports, and technical terminology.
ESS01.02.05	Edit copy to create focused written documents such as: agendas, audio-visu-als, bibliographies, drafts, forms/documents, notes, oral presentations, reports, and technical terminology.
ESS01.02.06	Comprehend key elements of oral and written information such as: cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries, and technical subject matter.
ESS01.02.07	Evaluate oral and written information for: accuracy, adequacy/sufficiency, appropriateness, clarity, conclusions/solutions, fact/opinion, propaganda, relevancy, validity, and relationship of ideas.
ESS01.02.08	Identify assumptions, purpose, outcomes/solutions, and propaganda techniques.
ESS01.02.09	Predict potential outcomes and/or solutions based on oral and written information regarding trends.
ESS01.02.10	Present formal and informal speeches including: discussion, information requests, interpretation, and persuasive arguments.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS01.03	Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career opportunities.
ESS01.03.01	Identify whole numbers, decimals, and fractions.
ESS01.03.02	Demonstrate knowledge of basic arithmetic operations such as: addition, subtraction, multiplication, and division.
ESS01.03.03	Demonstrate use of relational expressions such as: equal to, not equal, greater than, less than, etc.
ESS01.03.04	Apply data and measurements to solve a problem.
ESS01.03.05	Analyze Mathematical problem statements for missing and/or irrelevant data.
ESS01.03.06	Construct charts/tables/graphs from functions and data.
ESS01.03.07	Analyze data when interpreting operational documents.
ESS01.04	Demonstrate science knowledge and skills required to pursue the full range of post-secondary and career education opportunities.
ESS01.04.01	Evaluate scientific constructs including: conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of errors, and variables.
ESS01.04.02	Apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions, and problem identification.
Essential Topic ESS02	COMMUNICATIONS: <i>Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</i>
ESS02.01	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
ESS02.01.01	Determine the most appropriate reading strategy for identifying the overarching purpose of a text (i.e. skimming, reading for detail, reading for meaning or critical analysis).
ESS02.01.02	Demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions.
ESS02.01.03	Select the reading strategy or strategies needed to fully comprehend the content within a written document (i.e., skimming, reading for detail, reading for meaning or critical analysis).
ESS02.01.04	Interpret information, data, and observations to apply information learned from reading to actual practice.
ESS02.01.05	Transcribe information, data, and observations to apply information learned from reading to actual practice.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS02.01.06	Communicate information, data, and observations to apply information learned from reading to actual practice.
ESS02.02	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace.
ESS02.02.01	Employ verbal skills when obtaining and conveying information.
ESS02.02.02	Record information needed to present a report on a given topic or problem.
ESS02.02.03	Write internal and external business correspondence that conveys and/or obtains information effectively.
ESS02.02.04	Communicate with other employees to clarify workplace objectives.
ESS02.02.05	Communicate effectively with customers and employees to foster positive relationships.
ESS02.03	Locate, organize and reference written information from various sources to communicate with co-workers and clients/participants.
ESS02.03.01	Locate written information used to communicate with co-workers and customers.
ESS02.03.02	Organize information to use in written and oral communications.
ESS02.03.03	Reference the sources of information.
ESS02.04	Evaluate and use information resources to accomplish specific occupational tasks.
ESS02.04.01	Use informational texts, Internet web sites, and/or technical materials to review and apply information sources for occupational tasks.
ESS02.04.02	Evaluate the reliability of information from informational texts, Internet Web sites, and/or technical materials and resources.
ESS02.05	Use correct grammar, punctuation and terminology to write and edit documents.
ESS02.05.01	Compose multi-paragraph documents clearly, succinctly, and accurately.
ESS02.05.02	Use descriptions of audience and purpose when preparing and editing written documents.
ESS02.05.03	Use correct grammar, spelling, punctuation, and capitalization when preparing written documents.
ESS02.06	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
ESS02.06.01	Prepare oral presentations to provide information for specific purposes and audiences.
ESS02.06.02	Identify support materials that will enhance an oral presentation.
ESS02.06.03	Prepare support materials that will enhance an oral presentation.
ESS02.06.04	Deliver an oral presentation that sustains listeners' attention and interest.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS02.06.05	Align presentation strategies to the intended audience.
ESS02.06.06	Implement multi-media strategies for presentations.
ESS02.07	Interpret verbal and nonverbal cues/behaviors to enhance communication with co-workers and clients/participants.
ESS02.07.01	Interpret verbal behaviors when communicating with clients and co-workers.
ESS02.07.02	Interpret nonverbal behaviors when communicating with clients and co-workers.
ESS02.08	Apply active listening skills to obtain and clarify information.
ESS02.08.01	Interpret a given verbal message/information.
ESS02.08.02	Respond with restatement and clarification techniques to clarify information.
ESS02.09	Develop and interpret tables, charts, and figures to support written and oral communications.
ESS02.09.01	Create tables, charts, and figures to support written and oral communications.
ESS02.09.02	Interpret tables, charts, and figures used to support written and oral communication.
ESS02.10	Listen to and speak with diverse individuals to enhance communication skills.
ESS02.10.01	Apply factors and strategies for communicating with a diverse workforce.
ESS02.10.02	Demonstrate ability to communicate and resolve conflicts within a diverse workforce.
ESS02.11	Exhibit public relations skills to increase internal and external customer/client satisfaction.
ESS02.11.01	Communicate effectively when developing positive customer/client relationships.
Essential Topic ESS03	PROBLEM-SOLVING AND CRITICAL THINKING: <i>Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.</i>
ESS03.01	Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).
ESS03.01.01	Identify common tasks that require employees to use problem-solving skills.
ESS03.01.02	Analyze elements of a problem to develop creative solutions.
ESS03.01.03	Describe the value of using problem-solving and critical thinking skills to improve a situation or process.
ESS03.01.04	Create ideas, proposals, and solutions to problems.
ESS03.01.05	Evaluate ideas, proposals, and solutions to problems.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS03.01.06	Use structured problem-solving methods when developing proposals and solutions.
ESS03.01.07	Generate new and creative ideas to solve problems by brainstorming possible solutions.
ESS03.01.08	Critically analyze information to determine value to the problem-solving task.
ESS03.01.09	Guide individuals through the process of recognizing concerns and making informed decisions.
ESS03.01.10	Identify alternatives using a variety of problem-solving and critical thinking skills.
ESS03.01.11	Evaluate alternatives using a variety of problem-solving and critical thinking skills.
ESS03.02	Employ critical thinking and interpersonal skills to resolve conflicts with staff and/or customers.
ESS03.02.01	Analyze situations and behaviors that affect conflict management.
ESS03.02.02	Determine best options/outcomes for conflict resolution using critical thinking skills.
ESS03.02.03	Identify with others' feelings, needs, and concerns.
ESS03.02.04	Implement stress management techniques.
ESS03.02.05	Resolve conflicts with/for customers using conflict resolution skills.
ESS03.02.06	Implement conflict resolution skills to address staff issues/problems.
ESS03.03	Identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability.
ESS03.03.01	Write realistic performance goals, objectives and action plans.
ESS03.03.02	Monitor performance goals and adjust as necessary.
ESS03.03.03	Recognize goal achievement using appropriate rewards in the workplace.
ESS03.03.04	Communicate goal achievement with managers and co-workers.
ESS03.04	Conduct technical research to gather information necessary for decision-making.
ESS03.04.01	Align the information gathered to the needs of the audience.
ESS03.04.02	Gather technical information and data using a variety of resources.
ESS03.04.03	Analyze information and data for value to the research objectives.
ESS03.04.04	Evaluate information and data to determine value to research objectives.
Essential Topic ESS04	INFORMATION TECHNOLOGY APPLICATIONS: <i>Use information technology tools specific to the career cluster to access, manage, integrate, and create information.</i>
ESS04.01	Use Personal Information Management (PIM) applications to increase workplace efficiency.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS04.01.01	Manage personal schedules and contact information.
ESS04.01.02	Create memos and notes.
ESS04.02	Employ technological tools to expedite workflow.
ESS04.02.01	Use information technology tools to manage and perform work responsibilities.
ESS04.03	Operate electronic mail applications to communicate within a workplace.
ESS04.03.01	Use email to share files and documents.
ESS04.03.02	Identify the functions and purpose of email systems.
ESS04.03.03	Use email to communicate within and across organizations.
ESS04.04	Operate Internet applications to perform workplace tasks.
ESS04.04.01	Access and navigate Internet (e.g., use a web browser).
ESS04.04.02	Search for information and resources.
ESS04.04.03	Evaluate Internet resources for reliability and validity.
ESS04.05	Operate writing and publishing applications to prepare business communications.
ESS04.05.01	Prepare simple documents and other business communications.
ESS04.05.02	Prepare reports and other business communications by integrating graphics and other non-text elements.
ESS04.05.03	Prepare complex multi-media publications.
ESS04.06	Operate presentation applications to prepare presentations.
ESS04.06.01	Prepare presentations for training, sales and information sharing.
ESS04.06.02	Deliver presentations with supporting materials.
ESS04.07	Employ spreadsheet applications to organize and manipulate data.
ESS04.07.01	Create a spreadsheet.
ESS04.07.02	Perform calculations and analyses on data using a spreadsheet.
ESS04.08	Employ database applications to manage data.
ESS04.08.01	Manipulate data elements.
ESS04.08.02	Manage interrelated data elements.
ESS04.08.03	Analyze interrelated data elements.
ESS04.08.04	Generate reports showing interrelated data elements.
ESS04.09	Employ collaborative/groupware applications to facilitate group work.
ESS04.09.01	Facilitate group work through management of shared schedule and contact information.
ESS04.09.02	Facilitate group work through management of shared files and online information.
ESS04.09.03	Facilitate group work through instant messaging or virtual meetings.
ESS04.10	Employ computer operations applications to manage work tasks.
ESS04.10.01	Manage computer operations.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS04.10.02	Manage file storage.
ESS04.10.03	Compress or alter files.
ESS04.11	Use computer-based equipment (containing embedded computers or processors) to control devices.
ESS04.11.01	Operate computer driven equipment and machines.
ESS04.11.02	Use installation and operation manuals.
ESS04.11.03	Troubleshoot computer driven equipment and machines.
ESS04.11.04	Access support as needed to maintain operation of computer driven equipment and machines.
Essential Topic ESS05	SYSTEMS: <i>Understand roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. Identify how key organizational systems affect organizational performance and the quality of products and services. Understand global context of industries and careers.</i>
ESS05.01	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
ESS05.01.01	List the types and functions of businesses.
ESS05.01.02	Describe the types and functions of businesses.
ESS05.01.03	Explain the functions and interactions of common departments within a business.
ESS05.02	Implement quality control systems and practices to ensure quality products and services.
ESS05.02.01	Describe quality control standards and practices common to the workplace.
Essential Topic ESS06	SAFETY, HEALTH AND ENVIRONMENTAL: <i>Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.</i>
ESS06.01	Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
ESS06.01.01	Assess workplace conditions with regard to safety and health.
ESS06.01.02	Align safety issues with appropriate safety standards to ensure a safe workplace/jobsite.
ESS06.01.03	Identify safety hazards common to workplaces.
ESS06.01.04	Identify safety precautions to maintain a safe worksite.
ESS06.01.05	Select appropriate personal protective equipment as needed for a safe workplace/jobsite.
ESS06.01.06	Inspect personal protective equipment commonly used for selected career pathway.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS06.01.07	Use personal protective equipment according to manufacturer rules and regulations.
ESS06.01.08	Employ a safety hierarchy and communication system within the workplace/jobsite.
ESS06.01.09	Implement safety precautions to maintain a safe worksite.
ESS06.02	Complete work tasks in accordance with employee rights and responsibilities and employers obligations to maintain workplace safety and health.
ESS06.02.01	Identify rules and laws designed to promote safety and health in the workplace.
ESS06.02.02	State the rationale of rules and laws designed to promote safety and health.
ESS06.03	Employ emergency procedures as necessary to provide aid in workplace accidents.
ESS06.03.01	Use knowledge of First Aid procedures as necessary.
ESS06.03.02	Use knowledge of CPR procedures as necessary.
ESS06.03.03	Use safety equipment as necessary.
ESS06.04	Employ knowledge of response techniques to create a disaster and/or emergency response plan.
ESS06.04.01	Complete an assessment of an emergency and/or disaster situation.
ESS06.04.02	Create an emergency and/or disaster plan.
Essential Topic ESS07	LEADERSHIP AND TEAMWORK: <i>Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.</i>
ESS07.01	Employ leadership skills to accomplish organizational goals and objectives.
ESS07.01.01	Analyze the various roles of leaders within organizations (e.g. contribute ideas; share in building an organization; act as role models to employees by adhering to company policies, procedures, and standards; promote the organization's vision; and mentor others).
ESS07.01.02	Exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem solution, and investment in individuals when leading a group in solving a problem.
ESS07.01.03	Exhibit traits such as compassion, service, listening, coaching, developing others, team development, and understanding and appreciating others when acting as a manager of others in the workplace.
ESS07.01.04	Exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living, and change when interacting with others in general.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS07.01.05	Consider issues related to self, team, community, diversity, environment, and global awareness when leading others.
ESS07.01.06	Exhibit traits such as innovation, intuition, adaptation, life-long learning and coachability to develop leadership potential over time.
ESS07.01.07	Analyze leadership in relation to trust, positive attitude, integrity, and willingness to accept key responsibilities in a work situation.
ESS07.01.08	Describe observations of outstanding leaders using effective management styles.
ESS07.01.09	Participate in civic and community leadership and teamwork opportunities to enhance skills.
ESS07.02	Employ organizational and staff development skills to foster positive working relationships and accomplish organizational goals.
ESS07.02.01	Implement organizational skills when facilitating others' work efforts.
ESS07.02.02	Explain how to manage a staff that satisfies work demands while adhering to budget constraints.
ESS07.02.03	Describe how staff growth and development to increase productivity and employee satisfaction.
ESS07.02.04	Organize team involvement within a group environment.
ESS07.02.05	Work with others to develop and gain commitment to team goals.
ESS07.02.06	Distribute responsibility and work load fairly.
ESS07.02.07	Model leadership and teamwork qualities to aid in employee morale.
ESS07.02.08	Identify best practices for successful team functioning.
ESS07.02.09	Explain best practices for successful team functioning.
ESS07.03	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
ESS07.03.01	Work with others to achieve objectives in a timely manner.
ESS07.03.02	Promote the full involvement and use of team members' individual talents and skills.
ESS07.03.03	Employ conflict management skills to facilitate solutions.
ESS07.03.04	Demonstrate teamwork skills though working cooperatively with co-workers, supervisory staff, and others, both in and out of the organization, to achieve particular tasks.
ESS07.03.05	Demonstrate teamwork processes that provide team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability, and conflict resolution.
ESS07.03.06	Develop plans to improve team performance.
ESS07.03.07	Demonstrate commitment to and a positive attitude toward team goals.
ESS07.03.08	Take responsibility for shared group and individual work tasks.
ESS07.03.09	Assist team members in completing their work.
ESS07.03.10	Adapt effectively to changes in projects and work activities.
ESS07.03.11	Negotiate effectively to arrive at decisions.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS07.04	Establish and maintain effective working relationships with all levels of personnel and other departments in order to accomplish objectives and tasks.
ESS07.04.01	Build effective working relationships using interpersonal skills.
ESS07.04.02	Use positive interpersonal skills to work cooperatively with co-workers representing different cultures, genders and backgrounds.
ESS07.04.03	Manage personal skills to accomplish assignments.
ESS07.04.04	Treat people with respect.
ESS07.04.05	Provide constructive praise and criticism.
ESS07.04.06	Demonstrate sensitivity to and value for diversity.
ESS07.04.07	Manage stress and control emotions.
ESS07.05	Conduct and participate in meetings to accomplish work tasks.
ESS07.05.01	Develop meeting goals, objectives and agenda.
ESS07.05.02	Assign responsibilities for preparing materials and leading discussions.
ESS07.05.03	Prepare materials for leading discussion.
ESS07.05.04	Assemble and distribute meeting materials.
ESS07.05.05	Conduct meeting to achieve objectives within scheduled time.
ESS07.05.06	Demonstrate effective communication skills in meetings.
ESS07.05.07	Produce meeting minutes including decisions and next steps.
ESS07.05.08	Use parliamentary procedure, as needed, to conduct meetings.
ESS07.06	Employ mentoring skills to inspire and teach others.
ESS07.06.01	Use motivational techniques to enhance performance in others.
ESS07.06.02	Provide guidance to enhance performance in others.
Essential Topic	ETHICS AND LEGAL RESPONSIBILITIES: <i>Know and understand the importance of professional ethics and legal responsibilities.</i>
ESS08	
ESS08.01	Apply ethical reasoning to a variety of workplace situations in order to make ethical decisions.
ESS08.01.01	Evaluate alternative responses to workplace situations based on legal responsibilities and employer policies.
ESS08.01.02	Evaluate alternative responses to workplace situations based on personal or professional ethical responsibilities.
ESS08.01.03	Identify personal and long-term workplace consequences of unethical or illegal behaviors.
ESS08.01.04	Explain personal and long-term workplace consequences of unethical or illegal behaviors.
ESS08.01.05	Determine the most appropriate response to workplace situations based on legal and ethical considerations.
ESS08.01.06	Explain the most appropriate response to workplace situations based on legal and ethical considerations.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS08.02	Interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations.
ESS08.02.01	Locate information on organizational policies in handbooks and manuals.
ESS08.02.02	Discuss how specific organizational policies and procedures influence a specific work situation.
Essential Topic ESS09	EMPLOYABILITY AND CAREER DEVELOPMENT: <i>Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills.</i>
ESS09.01	Identify and demonstrate positive work behaviors and personal qualities needed to be employable.
ESS09.01.01	Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation.
ESS09.01.02	Demonstrate flexibility and willingness to learn new knowledge and skills.
ESS09.01.03	Exhibit commitment to the organization.
ESS09.01.04	Identify how work varies with regard to site, from indoor confined spaces to outdoor areas, including aerial space and a variety of climatic and physical conditions.
ESS09.01.05	Apply communication strategies when adapting to a culturally diverse environment.
ESS09.01.06	Manage resources in relation to the position (i.e. budget, supplies, computer, etc).
ESS09.01.07	Identify positive work-qualities typically desired in each of the career cluster's pathways.
ESS09.01.08	Manage work roles and responsibilities to balance them with other life roles and responsibilities.
ESS09.02	Develop a personal career plan to meet career goals and objectives.
ESS09.02.01	Develop career goals and objectives as part of a plan for future career direction.
ESS09.02.02	Develop strategies to reach career objectives.
ESS09.03	Demonstrate skills related to seeking and applying for employment to find and obtain a desired job.
ESS09.03.01	Use multiple resources to locate job opportunities.
ESS09.03.02	Prepare a résumé.
ESS09.03.03	Prepare a letter of application.
ESS09.03.04	Complete an employment application.
ESS09.03.05	Interview for employment.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS09.03.06	List the standards and qualifications that must be met in order to enter a given industry.
ESS09.03.07	Employ critical thinking and decision-making skills to exhibit qualifications to a potential employer.
ESS09.04	Maintain a career portfolio to document knowledge, skills and experience in a career field.
ESS09.04.01	Select educational and work history highlights to include in a career portfolio.
ESS09.04.02	Produce a record of work experiences, licenses, certifications and products.
ESS09.04.03	Organize electronic or physical portfolio for use in demonstrating knowledge, skills and experiences.
ESS09.05	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
ESS09.05.01	Compare employment opportunities to individual needs and career plan objectives.
ESS09.05.02	Evaluate employment opportunities based upon individual needs and career plan objectives.
ESS09.05.03	Demonstrate appropriate methods for accepting or rejecting employment offers.
ESS09.06	Identify and exhibit traits for retaining employment to maintain employment once secured.
ESS09.06.01	Model behaviors that demonstrate reliability and dependability.
ESS09.06.02	Maintain appropriate dress and behavior for the job to contribute to a safe and effective workplace/jobsite.
ESS09.06.03	Complete required employment forms and documentation such as I-9 form, work visa, W-4 and licensures to meet employment requirements.
ESS09.06.04	Summarize key activities necessary to retain a job in the industry.
ESS09.06.05	Identify positive work behaviors and personal qualities necessary to retain employment.
ESS09.07	Identify and explore career opportunities in one or more career pathways to build an understanding of the opportunities available in the cluster.
ESS09.07.01	Locate and identify career opportunities that appeal to personal career goals.
ESS09.07.02	Match personal interest and aptitudes to selected careers.
ESS09.08	Recognize and act upon requirements for career advancement to plan for continuing education and training.
ESS09.08.01	Identify opportunities for career advancement.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS09.08.02	Pursue education and training opportunities to acquire skills necessary for career advancement.
ESS09.08.03	Examine the organization and structure of various segments of the industry to prepare for career advancement.
ESS09.08.04	Research local and regional labor (workforce) market and job growth information to project potential for advancement.
ESS09.08.05	Manage employment relations to make career advancements.
ESS09.09	Continue professional development to keep current on relevant trends and information within the industry.
ESS09.09.01	Use self assessment, organizational priorities, journals, Internet sites, professional associations, peers and other resources to develop goals that address training, education and self-improvement issues.
ESS09.09.02	Read trade magazines and journals, manufacturers' catalogues, industry publications and Internet sites to keep current on industry trends.
ESS09.09.03	Participate in relevant conferences, workshops, mentoring activities and in-service training to stay current with recent changes in the field.
ESS09.10	Examine licensing, certification and credentialing requirements at the national, state and local levels to maintain compliance with industry requirements.
ESS09.10.01	Examine continuing education requirements related to licensing, certification, and credentialing requirements at the local, state and national levels for chosen occupation.
ESS09.10.02	Examine the procedures and paperwork involved in maintaining and updating licensure, certification and credentials for chosen occupation.
ESS09.10.03	Align ongoing licensing, certification and credentialing requirements to career plans and goals.
ESS09.11	Examine employment opportunities in entrepreneurship to consider entrepreneurship as an option for career planning.
ESS09.11.01	Describe the opportunities for entrepreneurship in a given industry.
Essential Topic ESS10	TECHNICAL SKILLS: <i>Use of technical knowledge and skills required to pursue careers in all career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.</i>
ESS10.01	Employ information management techniques and strategies in the workplace to assist in decision-making.
ESS10.01.01	Use information literacy skills when accessing, evaluating and disseminating information.
ESS10.01.02	Describe the nature and scope of information management.
ESS10.01.03	Maintain records to facilitate ongoing business operations.



States' Career Cluster Initiative Essential Knowledge and Skill Statements

ESS10.02	Employ planning and time management skills and tools to enhance results and complete work tasks.
ESS10.02.01	Develop goals and objectives.
ESS10.02.02	Prioritize tasks to be completed.
ESS10.02.03	Develop timelines using time management knowledge and skills.
ESS10.02.04	Use project-management skills to improve workflow and minimize costs.